WHAT IS CLAIMED IS:

1. A photopolymerizable composition comprising a polymerizable compound having an ethylenically unsaturated bond, a compound represented by the following general formula (1), and an organoboron compound represented by the following general formula (A):

General formula (1)

$$Z^1$$
 $Q^1$ 
 $R^1$ 
 $Z^2$ 
 $Q^2$ 
 $R^2$ 

wherein  $Q^1$  to  $Q^3$  each independently represents an oxygen atom or a sulfur atom;  $R^1$  and  $R^2$  each independently represents a hydrogen atom, an aliphatic group, an aromatic group, or a heterocyclic group; and  $Z^1$  and  $Z^2$  each independently represents a substituent necessary for the compound represented by the general formula (1) to become a dye;

General formula (A)

wherein  $R_a^{\ 1}$ ,  $R_a^{\ 2}$ , and  $R_a^{\ 3}$  each independently represents an aliphatic group, an aromatic group, a heterocyclic group, or  $-\mathrm{Si}R_a^{\ 5}R_a^{\ 6}R_a^{\ 7}$  where  $R_a^{\ 5}$ ,  $R_a^{\ 6}$ , and  $R_a^{\ 7}$  each independently represents

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an aliphatic group or an aromatic group;  $R_a^4$  represents an aliphatic group, and  $Y^*$  represents a group capable of forming a cation.

2. A photopolymerizable composition according to claim 1, wherein the compound represented by the general formula (1) is represented by the following general formula (4):

General formula (4)

$$G^1$$
 $G^2$ 
 $(L^2-L^1)_m$ 
 $Q^3$ 

wherein  $L^1$  and  $L^2$  each independently represents a methine group which may be substituted; m represents an integer of 0 to 3; and  $G^1$  and  $G^2$  each independently represents an electron-withdrawing group, or  $G^1$  and  $G^2$  join together to form an aromatic ring or a heterocycle.

3. A photopolymerizable composition comprising a polymerizable compound having an ethylenically unsaturated bond, a compound represented by the following general formula (2), and a compound capable of interacting with the compound represented by the following general formula (2) to generate a radical:

General formula (2)

wherein  $X^1$  represents  $NR^{12}$ , a sulfur atom, a selenium atom, or an oxygen atom;  $R^4$ ,  $R^5$ , and  $R^{12}$  each independently represents a hydrogen atom, an aliphatic group, an aromatic group, or a heterocyclic group; and  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ , and  $R^{11}$  each independently represents a hydrogen atom or a monovalent substituent, with the proviso that two or more selected from  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ ,  $R^{11}$ , and  $R^{12}$  may join together to form a ring.

4. A photopolymerizable composition according to claim 3, wherein the compound capable of interacting with the compound represented by the general formula (2) to generate a radical is an organoboron compound represented by the following general formula (A):

General formula (A)

wherein  $R_a^{\ 1}$ ,  $R_a^{\ 2}$ , and  $R_a^{\ 3}$  each independently represents an aliphatic group, an aromatic group, a heterocyclic group, or  $-\mathrm{SiR_a}^5 R_a^{\ 6} R_a^{\ 7}$  where  $R_a^{\ 5}$ ,  $R_a^{\ 6}$ , and  $R_a^{\ 7}$  each independently represents

an aliphatic group or an aromatic group;  $R_a^4$  represents an aliphatic group; and  $Y^*$  represents a group capable of forming a cation.

5. A photopolymerizable composition comprising a polymerizable compound having an ethylenically unsaturated bond, a compound represented by the following general formula (3), and a compound capable of interacting with the compound represented by the following general formula (3) to generate a radical:

General formula (3)

wherein  $R^{13}$  and  $R^{14}$  each independently represents a hydrogen atom or a monovalent substituent; and  $Z^3$  and  $Z^4$  each independently represents a substituent necessary for the compound represented by the general formula (3) to become a dye.

6. A photopolymerizable composition according to claim 5, wherein the compound represented by the general formula (3) is represented by the following general formula (5):

General formula (5)

$$G^{1}$$
  $G^{2}$   $(L^{2}-L^{1})_{m}$   $S$   $R^{13}$   $R^{14}$ 

wherein  $L^1$  and  $L^2$  each independently represents a methine group which may be substituted; m represents an integer of 0 to 3; and  $G^1$  and  $G^2$  each independently represents an electron-withdrawing group substituent or  $G^1$  and  $G^2$  join together to form an aromatic ring or a heterocycle.

7. A photopolymerizable composition according to claim 5, wherein the compound capable of interacting with the compound represented by the general formula (3) to generate a radical is an organoboron compound represented by the following general formula (A):

General formula (A)

wherein  $R_a^{\ 1}$ ,  $R_a^{\ 2}$ , and  $R_a^{\ 3}$  each independently represents an aliphatic group, an aromatic group, a heterocyclic group, or  $-\operatorname{SiR}_a^{\ 5}R_a^{\ 6}R_a^{\ 7}$  where  $R_a^{\ 5}$ ,  $R_a^{\ 6}$ , and  $R_a^{\ 7}$  each independently represents an aliphatic group or an aromatic group;  $R_a^{\ 4}$  represents an aliphatic group; and Y represents a group capable of forming

a cation.

8. A photopolymerizable composition according to claim 7, wherein the compound represented by the general formula (3) is represented by the following general formula (5):

General formula (5)

$$G^1$$
  $(L^2-L^1)_m$   $S$   $R^{13}$   $R^{14}$ 

wherein  $L^1$  and  $L^2$  each independently represents a methine group which may be substituted; m represents an integer of 0 to 3; and  $G^1$  and  $G^2$  each independently represents an electron-withdrawing group or  $G^1$  and  $G^2$  join together to form an aromatic ring or a heterocycle.

- 9. A recording material comprising a support having disposed thereon a recording layer containing at least microcapsules enclosing a color-forming component and the photopolymerizable composition described in claim 1, wherein the polymerizable compound having an ethylenically unsaturated bond is a compound having a site which reacts with the color-forming component and causes the color-forming component to develop a color.
- 10. A recording material according to claim 9 having a multilayer structure produced by laminating at least three recording layers to one another, each recording layer being

sensitive to light of a different wave length, and each recording layer developing a different color when used for recording.

- 11. A recording material comprising a support having disposed thereon a recording layer containing at least microcapsules enclosing a color-forming component, a color-forming compound which reacts with the color-forming component to develop a color, and the photopolymerizable composition according to claim 1, wherein the polymerizable compound having an ethylenically unsaturated bond is a color formation inhibiting compound having a site which inhibits the reaction between the color-forming component and the color-forming compound.
- 12. A recording material according to claim 11 having a multilayer structure produced by laminating at least three recording layers to one another, each recording layer being sensitive to light of a different wave length, and each recording layer developing a different color when used for recording.
- 13. A recording material comprising a support having disposed thereon a recording layer containing at least microcapsules enclosing a color-forming component and the photopolymerizable composition according to claim 3, wherein the polymerizable compound having an ethylenically unsaturated bond is a compound having a site which reacts with the color-forming component and causes the color-forming component to develop a color.

- 14. A recording material according to claim 13 having a multilayer structure produced by laminating at least three recording layers to one another, each recording layer being sensitive to light of a different wave length, and each recording layer developing a different color when used for recording.
- 15. A recording material comprising a support having disposed thereon a recording layer containing at least microcapsules enclosing a color-forming component, a color-forming compound which reacts with the color-forming component and causes the color-forming component to develop a color, and the photopolymerizable composition according to claim 3, wherein the polymerizable compound having an ethylenically unsaturated bond is a color formation inhibiting compound having a site which inhibits the reaction between the color-forming component and the color-forming compound.
- 16. A recording material according to claim 15 having a multilayer structure produced by laminating at least three recording layers to one another, each recording layer being sensitive to light of a different wave length, and each recording layer developing a different color when used for recording.
- 17. A recording material comprising a support having disposed thereon a recording layer containing at least microcapsules enclosing a color-forming component and the photopolymerizable composition according to claim 5, wherein

the polymerizable compound having an ethylenically unsaturated bond is a compound having a site which reacts with the color-forming component and causes the color-forming component to develop a color.

- 18. A recording material according to claim 17 having a multilayer structure produced by laminating at least three recording layers to one another, each recording layer being sensitive to light of a different wave length, and each recording layer developing a different color when used for recording.
- 19. A recording material comprising a support having disposed thereon a recording layer containing at least microcapsules enclosing a color-forming component, a color-forming compound which reacts with the color-forming component to develop a color, and the photopolymerizable composition according to claim 5, wherein the polymerizable compound having an ethylenically unsaturated bond is a color formation inhibiting compound having a site which inhibits the reaction between the color-forming component and the color-forming compound.
- 20. A recording material according to claim 19 having a multilayer structure produced by laminating at least three recording layers to one another, each recording layer being sensitive to light of a different wave length, and each recording layer developing a different color when used for recording.

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